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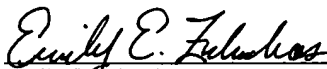
DOCKET NO.: C1037.70051US00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Bratzler et al.
Serial No.: 10/666,733
Confirmation No.: 6968
Filed: September 19, 2003
For: NUCLEIC ACIDS FOR THE TREATMENT OF DISORDERS ASSOCIATED WITH MICROORGANISMS
Examiner: Emily M. Le
Art Unit: 1648

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to MAIL STOP AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the 3rd day of April, 2006.


Emily E. Zukauskas

MAIL STOP AMENDMENT

Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Transmitted herewith are the following documents:

- Information Disclosure Statement
- PTO Form 1449 with cited references
- Return Receipt Postcard

If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at (617) 646-8000, Boston, Massachusetts.

A check is not enclosed. If a fee is required, the Commissioner is hereby authorized to charge Deposit Account No. 23/2825. A duplicate of this sheet is enclosed.

Respectfully submitted,

By:



Helen C. Lockhart, Ph.D., Reg. No.: 39,248
Wolf, Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
Telephone: (617) 646-8000

Docket No.: C1037.70051US00
Date: April 3, 2006
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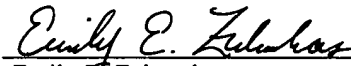
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Emily E. Zukauskas

MAIL STOP AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

STATEMENT FILED PURSUANT TO THE DUTY OF
DISCLOSURE UNDER 37 CFR §§1.56, 1.97 AND 1.98

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, the Applicant requests consideration of this Information Disclosure Statement.

PART I: Compliance with 37 C.F.R. §1.97

This Information Disclosure Statement has been filed before the mailing of a first Office action on the merits in the above-identified case.

No fee or certification is required.

PART II: Information Cited

The Applicant hereby makes of record in the above-identified application the information listed on the attached form PTO-1449 (modified PTO/SB/08). The order of presentation of the references should not be construed as an indication of the importance of the references.

The Applicant hereby makes the following additional information of record in the above-identified application.

The Applicant would like to bring to the Examiner's attention the following co-pending applications that may contain subject matter related to this application:

<u>Serial No.</u>	<u>Filing Date</u>	<u>Inventor(s)</u>	<u>Docket No.</u>
09/316,199	05-21-1999	McCluskie et al.	C1040.70006US00
09/337,584	06-21-1999	Krieg et al.	C1039.70020US00
09/337,893	06-21-1999	Krieg	C1039.70022US00
09/630,319	07-31-2000	Krieg et al.	C1039.70042US00
09/655,319	09-05-2000	Krieg et al.	C1039.70041US00
09/669,187	09-25-2000	Krieg et al.	C1039.70035US00
09/786,436	09-03-1999	Wagner et al.	C1041.70010US00
10/187,489	07-02-2002	Krieg et al.	C1039.70062US00
10/532,746	04-26-2005	Ahluwalia et al.	*C1037.70035US01
10/668,050	09-22-2003	Bratzler et al.	*C1037.70052US00
10/811,226	03-26-2004	Wagner et al.	*C1041.70005US01
11/179,008	07-08-2005	Hartmann et al.	*C1039.70044US02
11/255,100	10-20-2005	Krieg et al.	*C1037.70059US01
11/296,572	12-07-2005	Krieg et al.	*C1039.70048US20
11/296,644	12-07-2005	Krieg et al.	*C1039.70083US15
11/301,360	12-09-2005	Bratzler et al.	*C1037.70013US02
11/361,313	02-24-2006	Krieg et al.	*C1037.70060US01
11/368,333	03-03-2006	Lipford et al.	*C1041.70037US01
11/368,334	03-03-2006	Krieg et al.	C1039.70065US01

*A copy of this reference is not provided as the Office has waived the requirement under 37 C.F.R. 1.98(a)(2)(iii) for submitting a copy of a cited U.S. patent application if it is scanned to the Image File Wrapper system and is available on Private PAIR.

PART III: Remarks

Documents cited anywhere in the Information Disclosure Statement are enclosed unless otherwise indicated. It is respectfully requested that:

1. The Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims;
2. The enclosed form PTO-1449 (modified PTO/SB/08) be signed by the Examiner to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application;
3. The citations for the information be printed on any patent which issues from this application.

By submitting this Information Disclosure Statement, the Applicant makes no representation that a search has been performed, of the extent of any search performed, or that more relevant information does not exist.

By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b).

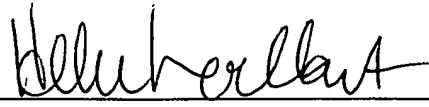
By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

Notwithstanding any statements by the Applicant, the Examiner is urged to form his or her own conclusion regarding the relevance of the cited information.

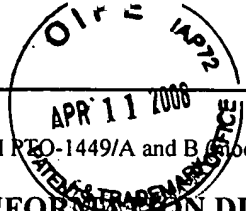
An early and favorable action is hereby requested.

Respectfully submitted,

By:


Helen C. Lockhart, Ph.D., Reg. No. 39,248
Wolf, Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
Telephone: (617) 646-8000

Docket No.: C1037.70051US00
Date: April 3, 2006
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 FORM PTO-1449/A and B (Modified PTO/SB/08)				APPLICATION NO.: 10/666,733		ATTY. DOCKET NO.: C1037.70051US00	
				FILING DATE: September 19, 2003		CONFIRMATION NO.: 6968	
				APPLICANT: Bratzler et al.			
				GROUP ART UNIT: 1648		EXAMINER: Emily M. Le	
Sheet	1	of	18				

U.S. PATENT DOCUMENTS

Examiner's Initials #	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication or Issue of Cited Document MM-DD-YYYY
		Number	Kind Code		
	A1	5,248,670		Draper et al.	09-28-1993
	A2	5,457,189		Crooke et al.	10-10-1995
	A3	5,514,577		Draper et al.	05-07-1996
	A4	5,567,604		Rando et al.	10-22-1996
	A5	5,576,302		Cook et al.	11-19-1996
	A6	5,663,153		Hutcherson et al.	09-02-1997
	A7	5,679,647		Carson et al.	10-21-1997
	A8	5,684,147		Agrawal et al.	11-04-1997
	A9	5,723,335		Hutcherson et al.	03-03-1998
	A10	5,728,518		Carmichael	03-17-1998
	A11	5,804,566		Carson et al.	09-08-1998
	A12	5,849,719		Carson et al.	12-15-1998
	A13	6,174,872	B1	Carson et al.	01-16-2001
	A14	6,184,369	B1	Rando et al.	02-06-2001
	A15	6,194,388	B1	Krieg et al.	02-27-2001
	A16	6,207,646	B1	Krieg et al.	03-27-2001
	A17	6,214,806	B1	Krieg et al.	04-10-2001
	A18	6,218,371	B1	Krieg et al.	04-17-2001
	A19	6,221,882		Macfarlane	04-24-2001
	A20	6,225,292	B1	Raz et al.	05-01-2001
	A21	6,239,116	B1	Krieg et al.	05-29-2001
	A22	6,339,068	B1	Krieg et al.	01-15-2002
	A23	6,339,630		Macfarlane	06-04-2002
	A24	6,406,705	B1	Davis et al.	06-18-2002
	A25	6,426,336	B1	Carson et al.	07-30-2002
	A26	6,429,199	B1	Krieg et al.	08-06-2002
	A27	6,479,504		Macfarlane et al.	11-12-2002
	A28	6,498,147	B1	Nerenberg et al.	12-24-2002
	A29	6,498,148	B1	Raz	12-24-2002
	A30	6,503,533	B1	Korba et al.	01-07-2003
	A31	6,514,948	B1	Raz et al.	02-04-2003

EXAMINER:	DATE CONSIDERED:
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08) INFORMATION DISCLOSURE STATEMENT BY APPLICANT				APPLICATION NO.: 10/666,733		ATTY. DOCKET NO.: C1037.70051US00			
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				GROUP ART UNIT: 1648		EXAMINER: Emily M. Le			
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	A32	6,521,637		Macfarlane	02-18-2003
	A33	6,534,062	B1	Raz et al.	03-18-2003
	A34	6,552,006	B2	Raz et al.	04-22-2003
	A35	6,558,670	B1	Friede et al.	05-06-2003
	A36	6,562,798	B1	Schwartz	05-13-2003
	A37	6,589,940	B1	Raz et al.	07-08-2003
	A38	6,610,661	B1	Carson et al.	08-26-2003
	A39	6,613,751	B1	Raz et al.	09-02-2003
	A40	6,653,292	B1	Krieg et al.	11-25-2003
	A41	6,727,230	B1	Hutcherson et al.	04-27-2004
	A42	6,737,066	B1	Moss	05-18-2004
	A43	6,821,957	B1	Krieg et al.	11-23-2004
	A44	6,835,395	B1	Semple et al.	12-28-2004
	A45	6,943,240		Bauer et al.	09-13-2005
	A46	6,949,520		Hartmann et al.	09-27-2005
	A47	7,001,890		Wagner et al.	02-26-2006
	A48	2001-0046967	A1	Van Nest et al.	11-29-2001
	A49	2002-0028784	A1	Van Nest et al.	03-07-2002
	A50	2002-0042387	A1	Raz et al.	04-11-2002
	A51	2002-0055477	A1	Van Nest et al.	05-09-2002
	A52	2002-0065236	A1	Yew et al.	05-30-2002
	A53	2002-0086839	A1	Raz et al.	07-04-2002
	A54	2002-0091097	A1	Bratzler et al.	07-11-2002
	A55	2002-0098199	A1	Van Nest et al.	07-25-2002
	A56	2002-0107212	A1	Van Nest et al.	08-08-2002
	A57	2002-0142978	A1	Raz et al.	10-03-2002
	A58	2002-0164341	A1	Davis et al.	11-07-2002
	A59	2003-0022852	A1	Van Nest et al.	01-30-2003
	A60	2003-0027782	A1	Carson et al.	02-06-2003
	A61	2003-0026801	A1	Weiner et al.	02-06-2003
	A62	2003-0049266	A1	Fearon et al.	03-13-2003
	A63	2003-0050261	A1	Krieg et al.	03-13-2003
	A64	2003-0050268	A1	Krieg et al.	03-13-2003
	A65	2003-0059773	A1	Van Nest et al.	03-27-2003
	A66	2003-0064064	A1	Dina et al.	04-03-2003

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	A67	2003-0078223	A1	Raz et al.	04-24-2003
	A68	2003-0091599	A1	Davis et al.	05-15-2003
	A69	2003-0092663	A1	Raz et al.	05-15-2003
	A70	2003-0100527	A1	Krieg et al.	05-29-2003
	A71	2003-0109469	A1	Carson et al.	06-12-2003
	A72	2003-0119773	A1	Raz et al.	06-26-2003
	A73	2003-0125284	A1	Raz et al.	07-03-2003
	A74	2003-0129251	A1	Van Nest et al.	07-10-2003
	A75	2003-0130217	A1	Raz et al.	07-10-2003
	A76	2003-0133988	A1	Fearon et al.	07-17-2003
	A77	2003-0139364	A1	Krieg et al.	07-24-2003
	A78	2003-0142977	A1	Murgatroyd et al.	07-31-2003
	A79	2003-0143213	A1	Raz et al.	07-31-2003
	A80	2003-0147870	A1	Raz et al.	08-07-2003
	A81	2003-0148316	A1	Lipford et al.	08-07-2003
	A82	2003-0148976	A1	Krieg et al.	08-07-2003
	A83	2003-0175731	A1	Fearon et al.	09-18-2003
	A84	2003-0176373	A1	Raz et al.	09-18-2003
	A85	2003-0176389	A1	Raz et al.	09-18-2003
	A86	2003-0181406	A1	Schetter et al.	09-25-2003
	A87	2003-0186921	A1	Carson et al.	10-02-2003
	A88	2003-0191079	A1	Krieg et al.	10-09-2003
	A89	2003-0199466	A1	Fearon et al.	10-23-2003
	A90	2003-0203861	A1	Carson et al.	10-30-2003
	A91	2003-0212026	A1	Krieg et al.	11-13-2003
	A92	2003-0212028	A1	Raz et al.	11-13-2003
	A93	2003-0216340	A1	Van Nest et al.	11-20-2003
	A94	2003-0224010	A1	Davis et al.	12-04-2003
	A95	2003-0225016	A1	Fearon et al.	12-04-2003
	A96	2003-0232074	A1	Lipford et al.	12-18-2003
	A97	2003-0232780	A1	Carson et al.	12-18-2003
	A98	2003-0232856	A1	Macfarlane	12-18-2003
	A99	2004-0006010	A1	Carson et al.	01-08-2004
	A100	2004-0006034	A1	Raz et al.	01-08-2004
	A101	2004-0009942	A1	Van Nest et al.	01-15-2004

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	A102	2004-0009949	A1	Krieg	01-15-2004
	A103	2004-0030118	A1	Wagner et al.	02-12-2004
	A104	2004-0053880	A1	Krieg	03-18-2004
	A105	2004-0067902	A9	Bratzler et al.	04-08-2004
	A106	2004-0067905	A1	Krieg	04-08-2004
	A107	2004-0087534	A1	Krieg et al.	05-06-2004
	A108	2004-0087538	A1	Krieg et al.	05-06-2004
	A109	2004-0092468	A1	Schwartz et al.	05-13-2004
	A110	2004-0092472	A1	Krieg	05-13-2004
	A111	2004-0105872	A1	Klinman et al.	06-03-2004
	A112	2004-0106568	A1	Krieg et al.	06-03-2004
	A113	2004-0115219	A1	Ahn et al.	06-17-2004
	A114	2004-0131628	A1	Bratzler et al.	07-08-2004
	A115	2004-0132685	A1	Krieg et al.	07-08-2004
	A116	2004-0142469	A1	Krieg et al.	07-22-2004
	A117	2004-0143112	A1	Krieg et al.	07-22-2004
	A118	2004-0147468	A1	Krieg et al.	07-29-2004
	A119	2004-0152649	A1	Krieg	08-05-2004
	A120	2004-0152656	A1	Krieg et al.	08-05-2004
	A121	2004-0152657	A1	Krieg et al.	08-05-2004
	A122	2004-0162258	A1	Krieg et al.	08-19-2004
	A123	2004-0162262	A1	Krieg et al.	08-19-2004
	A124	2004-0167089	A1	Krieg et al.	08-26-2004
	A125	2004-0171150	A1	Krieg et al.	09-02-2004
	A126	2004-0171571	A1	Krieg et al.	09-02-2004
	A127	2004-0181045	A1	Krieg et al.	09-16-2004
	A128	2004-0198680	A1	Krieg	10-07-2004
	A129	2004-0198688	A1	Krieg et al.	10-07-2004
	A130	2004-0229835	A1	Krieg et al.	11-18-2004
	A131	2004-0234512	A1	Wagner et al.	11-25-2004
	A132	2004-0235770	A1	Davis et al.	11-25-2004
	A133	2004-0235774	A1	Bratzler et al.	11-25-2004
	A134	2004-0235777	A1	Wagner et al.	11-25-2004
	A135	2004-0235778	A1	Wagner et al.	11-25-2004
	A136	2004-0247662	A1	Dow et al.	12-09-2004

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Sheet	5	of	18						

	A137	2004-0266719	A1	McCluskie et al.	12-30-2004
	A138	2005-0004061	A1	Krieg et al.	01-06-2005
	A139	2005-0004062	A1	Krieg et al.	01-06-2005
	A140	2005-0009774	A1	Krieg et al.	01-13-2005
	A141	2005-0013812	A1	Dow et al.	01-20-2005
	A142	2005-0031638	A1	Dalemans et al.	02-10-2005
	A143	2005-0032734	A1	Davis et al.	02-10-2005
	A144	2005-0032736	A1	Krieg et al.	02-10-2005
	A145	2005-0037403	A1	Krieg et al.	02-17-2005
	A146	2005-0037985	A1	Krieg et al.	02-17-2005
	A147	2005-0043529	A1	Davis et al.	02-24-2005
	A148	2005-0049215	A1	Krieg et al.	03-03-2005
	A149	2005-0049216	A1	Krieg et al.	03-03-2005
	A150	2005-0054601	A1	Wagner et al.	03-10-2005
	A151	2005-0054602	A1	Krieg et al.	03-10-2005
	A152	2005-0059619	A1	Krieg et al.	03-17-2005
	A153	2005-0059625	A1	Krieg et al.	03-17-2005
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	A156	2005-0070491	A1	Krieg et al.	03-31-2005
	A157	2005-0075302	A1	Hutcherson et al.	04-07-2005
	A158	2005-0079152	A1	Bot et al.	04-14-2005
	A159	2005-0100983	A1	Bauer et al.	05-12-2005
	A160	2005-0101554	A1	Krieg et al.	05-12-2005
	A161	2005-0101557	A1	Krieg et al.	05-12-2005
	A162	2005-0119273	A1	Lipford et al.	06-02-2005
	A163	2005-0123523	A1	Krieg et al.	06-09-2005
	A164	2005-0130911	A1	Uhlmann et al.	06-16-2005
	A165	2005-0148537	A1	Krieg et al.	07-07-2005
	A166	2005-0169888	A1	Hartman et al.	08-04-2005
	A167	2005-0171047	A1	Krieg et al.	08-04-2005
	A168	2005-0181422	A1	Bauer et al.	08-18-2005
	A169	2005-0182017	A1	Krieg	08-18-2005
	A170	2005-0197314	A1	Krieg et al.	09-08-2005
	A171	2005-0215500	A1	Krieg et al.	09-29-2005

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	A172	2005-0215501	A1	Lipford et al.	09-29-2005
	A173	2005-0233995	A1	Krieg et al.	10-20-2005
	A174	2005-0233999	A1	Krieg et al.	10-20-2005
	A175	2005-0239732	A1	Krieg et al.	10-27-2005
	A176	2005-0239733	A1	Jurk et al.	10-27-2005
	A177	2005-0239734	A1	Uhlmann et al.	10-27-2005
	A178	2005-0239736	A1	Krieg et al.	10-27-2005
	A179	2005-0244380	A1	Krieg et al.	11-03-2005
	A180	2005-0245477	A1	Krieg et al.	11-03-2005
	A181	2005-0244379	A1	Krieg et al.	11-03-2005
	A182	2005-0250726	A1	Krieg et al.	11-10-2005
	A183	2005-0256073	A1	Lipford et al.	11-17-2005
	A184	2005-0267057	A1	Krieg	12-01-2005
	A185	2005-0267064	A1	Krieg et al.	12-01-2005
	A186	2005-0277604	A1	Krieg et al.	12-15-2005
	A187	2005-0277609	A1	Krieg et al.	12-15-2005
	A188	2006-0003955	A1	Krieg et al.	01-05-2006
	A189	2006-0003962	A1	Ahluwalia et al.	01-05-2006
	A190	2006-0019916	A1	Krieg et al.	01-26-2006
	A191	2006-0019923	A1	Davis et al.	01-26-2006
	A192	2006-0058251	A1	Krieg et al.	03-16-2006

FOREIGN PATENT DOCUMENTS

Examiner's Initials #	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Translation (Y/N)
		Office/ Country	Number	Kind Code			
	B1	EP	0 302 758	A1	New England Medical Center Hospitals, Inc.	02-08-1989	
	B2	EP	0 468 520	A2	Mitsui Toatsu Chemicals, Inc.	01-29-1992	
	B3	KR	2001063153		Genexine Inc.	07-09-2001	Y-Abstract
	B4	WO	91/12811	A1	ISIS Pharmaceuticals Inc.	09-05-1991	
	B5	WO	92/03456	A1	ISIS Pharmaceuticals Inc.	03-05-1992	
	B6	WO	94/19945	A1	ISIS Pharmaceuticals Inc.	09-15-1994	
	B7	WO	96/02555	A1	University of Iowa Research Foundation	02-01-1996	
	B8	WO	98/49288	A1	Hybridon Inc.	11-05-1998	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08) INFORMATION DISCLOSURE STATEMENT BY APPLICANT				APPLICATION NO.: 10/666,733		ATTY. DOCKET NO.: C1037.70051US00			
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	B9	WO	99/33488	A2	SmithKline Beecham Biologicals S.A.	07-08-1999	
	B10	WO	99/52549	A1	SmithKline Beecham Biologicals S.A.	10-29-1999	
	B11	WO	99/56755	A1	University of Iowa Research Foundation	11-11-1999	
	B12	WO	00/06588	A1	University of Iowa Research Foundation	02-10-2000	
	B13	WO	00/20039	A1	The Regents of the University of California	04-13-2000	
	B14	WO	00/21556	A1	Dynavax Technologies Corporation	04-20-2000	
	B15	WO	00/41463	A2	SmithKline Beecham Biologicals, S.A.	07-20-2000	
	B16	WO	00/61151	A2	The Government of the United States of America	10-19-2000	
	B17	WO	00/62787	A1	The Regents of the University of California	10-26-2000	
	B18	WO	00/67787	A2	The Immune Response Corporation	11-16-2000	
	B19	WO	00/75304	A1	Aventis Pasteur [FR]	12-14-2000	Y-Abstract
	B20	WO	01/12223	A2	Dynavax Technologies Corporation	02-22-2001	
	B21	WO	01/62909	A1	Aventis Pasteur [FR]	08-30-2001	Y-Abstract
	B22	WO	01/68103	A2	Dynavax Technologies Corporation	09-20-2001	
	B23	WO	02/28428	A2	Aventis Pasteur [FR]	04-11-2002	Y-Abstract
	B24	WO	03/000232	A2	Dynavax Technologies Corporation	01-03-2003	
	B25	WO	03/030656	A2	Qiagen GMBH [DE]	04-17-2003	
	B26	WO	2004/007743	A2	Coley Pharmaceutical GmbH	01-22-2004	
	B27	WO	2004/026888	A2	Coley Pharmaceutical GmbH	04-01-2004	
	B28	WO	2004/094671	A2	Coley Pharmaceutical GmbH	11-04-2004	

OTHER ART — NON PATENT LITERATURE DOCUMENTS

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
	C1	AGRAWAL et al., Chapter 19: Pharmacokinetics and bioavailability of antisense oligonucleotides following oral and colorectal administrations in experimental animals. p525-43.	
	C2	ANITESCU et al., Interleukin-10 functions in vitro and in vivo to inhibit bacterial DNA-induced secretion of interleukin-12. J Interferon Cytokine Res. 1997 Dec;17(12):781-8.	
	C3	BALLAS et al., Induction of NK activity in murine and human cells by CpG motifs in oligodeoxynucleotides and bacterial DNA. J Immunol. 1996 Sep 1;157(5):1840-5.	
	C4	BAUER et al., Human TLR9 confers responsiveness to bacterial DNA via species-specific CpG motif recognition. Proc Natl Acad Sci U S A. 2001 Jul 31;98(16):9237-42.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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				APPLICANT: Bratzler et al.			
				GROUP ART UNIT: 1648		EXAMINER: Emily M. Le	
Sheet	8	of	18				

C5	BAUER et al., DNA activates human immune cells through a CpG sequence-dependent manner. Immunology. 1999 Aug;97(4):699-705.	
C6	BAUER et al., Bacterial CpG-DNA triggers activation and maturation of human CD11c-, CD123+ dendritic cells. J Immunol. 2001 Apr 15;166(8):5000-7.	
C7	BLAZAR et al., Synthetic unmethylated cytosine-phosphate-guanosine oligodeoxynucleotides are potent stimulators of antileukemia responses in naive and bone marrow transplant recipients. Blood. 2001 Aug 15;98(4):1217-25.	
C8	BOGGS et al., Characterization and modulation of immune stimulation by modified oligonucleotides. Antisense Nucleic Acid Drug Dev. 1997 Oct;7(5):461-71.	
C9	BRANDA et al., Immune stimulation by an antisense oligomer complementary to the rev gene of HIV-1. Biochem Pharmacol. 1993 May 25;45(10):2037-43.	
C10	BRANDA et al., Amplification of antibody production by phosphorothioate oligodeoxynucleotides. J Lab Clin Med. 1996 Sep;128(3):329-38.	
C11	BRAZOLOT et al., CpG DNA can induce strong Th1 humoral and cell-mediated immune responses against hepatitis B surface antigen in young mice. Proc Natl Acad Sci U S A. 1998 Dec 22;95(26):15553-8.	
C12	BROIDE et al., DNA-Based immunization for asthma. Int Arch Allergy Immunol. 1999 Feb-Apr;118(2-4):453-6.	
C13	BRUNNER et al., Enhanced dendritic cell maturation by TNF-alpha or cytidine-phosphate-guanosine DNA drives T cell activation in vitro and therapeutic anti-tumor immune responses in vivo. J Immunol. 2000 Dec 1;165(11):6278-86.	
C14	CARPENTIER et al., Successful treatment of intracranial gliomas in rat by oligodeoxynucleotides containing CpG motifs. Clin Cancer Res. 2000 Jun;6(6):2469-73.	
C15	CELLA et al., Plasmacytoid dendritic cells activated by influenza virus and CD40L drive a potent TH1 polarization. Nat Immunol. 2000 Oct;1(4):305-10.	
C16	CELLA et al., Plasmacytoid monocytes migrate to inflamed lymph nodes and produce large amounts of type I interferon. Nat Med. 1999 Aug;5(8):919-23.	
C17	CHACE et al., Bacterial DNA-induced NK cell IFN-gamma production is dependent on macrophage secretion of IL-12. Clin Immunol Immunopathol. 1997 Aug;84(2):185-93.	
C18	CHELVARAJAN et al., CpG oligodeoxynucleotides overcome the unresponsiveness of neonatal B cells to stimulation with the thymus-independent stimuli anti-IgM and TNP-Ficoll. Eur J Immunol. 1999 Sep;29(9):2808-18.	
C19	CHEN et al., Protective immunity induced by oral immunization with a rotavirus DNA vaccine encapsulated in microparticles. J Virol. 1998 Jul;72(7):5757-61.	
C20	CHU et al., CpG oligodeoxynucleotides act as adjuvants that switch on T helper 1 (Th1) immunity. J Exp Med. 1997 Nov 17;186(10):1623-31.	
C21	COSSUM et al., Disposition of the 14C-labeled phosphorothioate oligonucleotide ISIS 2105 after intravenous administration to rats. J Pharmacol Exp Ther. 1993 Dec;267(3):1181-90.	
C22	COWDERY et al., Bacterial DNA induces NK cells to produce IFN-gamma in vivo and increases the toxicity of lipopolysaccharides. J Immunol. 1996 Jun 15;156(12):4570-5.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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				APPLICANT: Bratzler et al.			
				GROUP ART UNIT: 1648		EXAMINER: Emily M. Le	
Sheet	9	of	18				

	C23	COWSERT et al., In vitro evaluation of phosphorothioate oligonucleotides targeted to the E2 mRNA of papillomavirus: potential treatment for genital warts. Antimicrob Agents Chemother. 1993 Feb;37(2):171-7.	
	C24	DAVIS et al., CpG DNA is a potent enhancer of specific immunity in mice immunized with recombinant hepatitis B surface antigen. J Immunol. 1998 Jan 15;160(2):870-6.	
	C25	DAVIS et al., CpG DNA overcomes hyporesponsiveness to hepatitis B vaccine in orangutans. Vaccine. 2000 Mar 17;18(18):1920-4.	
	C26	DAVIS, Use of CpG DNA for enhancing specific immune responses. Curr Top Microbiol Immunol. 2000;247:171-83.	
	C27	DAVIS et al., CpG ODN is safe and highly effective in humans as adjuvant to HBV vaccine: Preliminary results of Phase I trial with CpG ODN 7909. Third Annual Conference on Vaccine Res. 2000. Abstract s25, number 47.	
	C28	DEML et al., Immunostimulatory CpG motifs trigger a T helper-1 immune response to human immunodeficiency virus type-1 (HIV-1) gp 160 envelope proteins. Clin Chem Lab Med. 1999 Mar;37(3):199-204.	
	C29	ELKINS et al., Bacterial DNA containing CpG motifs stimulates lymphocyte-dependent protection of mice against lethal infection with intracellular bacteria. J Immunol. 1999 Feb 15;162(4):2291-8.	
	C30	FREIDAG et al., CpG oligodeoxynucleotides and interleukin-12 improve the efficacy of Mycobacterium bovis BCG vaccination in mice challenged with M. tuberculosis. Infect Immun. 2000 May;68(5):2948-53.	
	C31	FULTZ et al., Transient increases in numbers of infectious cells in an HIV-infected chimpanzee following immune stimulation. AIDS Res Hum Retroviruses. 1992 Feb;8(2):313-7.	
	C32	GALLICHAN et al., Specific secretory immune responses in the female genital tract following intranasal immunization with a recombinant adenovirus expressing glycoprotein B of herpes simplex virus. Vaccine. 1995 Nov;13(16):1589-95.	
	C33	GALLICHAN et al., Intranasal immunization with CpG oligodeoxynucleotides as an adjuvant dramatically increases IgA and protection against herpes simplex virus-2 in the genital tract. J Immunol. 2001 Mar 1;166(5):3451-7.	
	C34	GAO et al., Bacterial DNA and lipopolysaccharide induce synergistic production of TNF-alpha through a post-transcriptional mechanism. J Immunol. 2001 Jun 1;166(11):6855-60.	
	C35	GEISLER et al., Enhancement of cellular and humoral immune responses to hepatitis C virus core protein using DNA-based vaccines augmented with cytokine-expressing plasmids. J Immunol. 1997 Feb 1;158(3):1231-7.	
	C36	GOMIS et al., Protection of chickens against Escherichia coli infections by DNA containing CpG motifs. Infect Immun. 2003 Feb;71(2):857-63.	
	C37	GOUTTEFANGEAS et al., Problem solving for tumor immunotherapy. Nat Biotechnol. 2000 May;18(5):491-2.	
	C38	GRAMZINSKI et al., Interleukin-12- and gamma interferon-dependent protection against malaria conferred by CpG oligodeoxynucleotide in mice. Infect Immun. 2001 Mar;69(3):1643-9.	
	C39	GROSSMANN et al., Avoiding tolerance against prostatic antigens with subdominant peptide epitopes. J Immunother. 2001 May-Jun;24(3):237-41.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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				APPLICANT: Bratzler et al.			
				GROUP ART UNIT: 1648		EXAMINER: Emily M. Le	
Sheet	10	of	18				

	C40	GURSEL et al., Sterically stabilized cationic liposomes improve the uptake and immunostimulatory activity of CpG oligonucleotides. J Immunol. 2001 Sep 15;167(6):3324-8.	
	C41	HAFNER et al., Antimetastatic effect of CpG DNA mediated by type I IFN. Cancer Res. 2001 Jul 15;61(14):5523-8.	
	C42	HALPERN et al., Bacterial DNA induces murine interferon-gamma production by stimulation of interleukin-12 and tumor necrosis factor-alpha. Cell Immunol. 1996 Jan 10;167(1):72-8.	
	C43	HANCOCK et al., CpG containing oligodeoxynucleotides are potent adjuvants for parenteral vaccination with the fusion (F) protein of respiratory syncytial virus (RSV). Vaccine. 2001 Sep 14;19(32):4874-82.	
	C44	HARTMANN et al., CpG DNA and LPS induce distinct patterns of activation in human monocytes. Gene Ther. 1999 May;6(5):893-903.	
	C45	HARTMANN et al., Mechanism and function of a newly identified CpG DNA motif in human primary B cells. J Immunol. 2000 Jan 15;164(2):944-53.	
	C46	HARTMANN et al., Delineation of a CpG phosphorothioate oligodeoxynucleotide for activating primate immune responses in vitro and in vivo. J Immunol. 2000 Feb 1;164(3):1617-24.	
	C47	HARTMANN et al., CpG DNA: a potent signal for growth, activation, and maturation of human dendritic cells. Proc Natl Acad Sci U S A. 1999 Aug 3;96(16):9305-10.	
	C48	HASLETT et al., Strong human immunodeficiency virus (HIV)-specific CD4+ T cell responses in a cohort of chronically infected patients are associated with interruptions in anti-HIV chemotherapy. J Infect Dis. 2000 Apr;181(4):1264-72.	
	C49	HAVLIR et al., Maintenance antiretroviral therapies in HIV infected patients with undetectable plasma HIV RNA after triple-drug therapy. AIDS Clinical Trials Group Study 343 Team. N Engl J Med. 1998 Oct 29;339(18):1261-8.	
	C50	HAYASHI et al., Enhancement of innate immunity against Mycobacterium avium infection by immunostimulatory DNA is mediated by indoleamine 2,3-dioxygenase. Infect Immun. 2001 Oct;69(10):6156-64.	
	C51	HEEG et al., CpG DNA as a Th1 trigger. Int Arch Allergy Immunol. 2000 Feb;121(2):87-97.	
	C52	HINKULA et al., Recognition of prominent viral epitopes induced by immunization with human immunodeficiency virus type 1 regulatory genes. J Virol. 1997 Jul;71(7):5528-39.	
	C53	HO, Toward HIV eradication or remission: the tasks ahead. Science. 1998 Jun 19;280(5371):1866-7.	
	C54	HOPKIN et al., Curbing the CpGs of Bacterial and Viral DNA. BioMedNet. 1999 Jun25; Issue 57.	
	C55	HORNER et al., Mucosal adjuvant activity of immunostimulatory DNA sequences. Springer Semin Immunopathol. 2000;22(1-2):133-46.	
	C56	HUANG et al., Induction and regulation of Th1-inducing cytokines by bacterial DNA, lipopolysaccharide, and heat-inactivated bacteria. Infect Immun. 1999 Dec;67(12):6257-63.	
	C57	HUNTER et al., Biodegradable microspheres containing group B Streptococcus vaccine: immune response in mice. Am J Obstet Gynecol. 2001 Nov;185(5):1174-9.	
	C58	IHO et al., Oligodeoxynucleotides containing palindrome sequences with internal 5'-CpG-3' act directly on human NK and activated T cells to induce IFN-gamma production in vitro. J Immunol. 1999 Oct 1;163(7):3642-52.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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				APPLICANT: Bratzler et al.			
				GROUP ART UNIT: 1648		EXAMINER: Emily M. Le	
Sheet	11	of	18				

	C59	IMAMI et al., Assessment of type 1 and type 2 cytokines in HIV type 1-infected individuals: impact of highly active antiretroviral therapy. AIDS Res Hum Retroviruses. 1999 Nov 20;15(17):1499-508.	
	C60	IVERSEN et al., Pharmacokinetics of an antisense phosphorothioate oligodeoxynucleotide against rev from human immunodeficiency virus type 1 in the adult male rat following single injections and continuous infusion. Antisense Res Dev. 1994 Spring;4(1):43-52.	
	C61	JAKOB et al., Activation of cutaneous dendritic cells by CpG-containing oligodeoxynucleotides: a role for dendritic cells in the augmentation of Th1 responses by immunostimulatory DNA. J Immunol. 1998 Sep 15;161(6):3042-9.	
	C62	JAKOB et al., Bacterial DNA and CpG-containing oligodeoxynucleotides activate cutaneous dendritic cells and induce IL-12 production: implications for the augmentation of Th1 responses. Int Arch Allergy Immunol. 1999 Feb-Apr;118(2-4):457-61.	
	C63	JOHNSON et al., Immunopharmacology, Infection, and Disease, 291-301, 1987.	
	C64	JONES et al., Synthetic oligodeoxynucleotides containing CpG motifs enhance immunogenicity of a peptide malaria vaccine in Aotus monkeys. Vaccine. 1999 Aug 6;17(23-24):3065-71.	
	C65	KATAOKA et al., Antitumor activity of synthetic oligonucleotides with sequences from cDNA encoding proteins of Mycobacterium bovis BCG. Jpn J Cancer Res. 1992 Mar;83(3):244-7.	
	C66	KATAOKA et al., Immunotherapeutic potential in guinea-pig tumor model of deoxyribonucleic acid from Mycobacterium bovis BCG complexed with poly-L-lysine and carboxymethylcellulose. Jpn J Med Sci Biol. 1990 Oct;43(5):171-82.	
	C67	KIMURA et al., Binding of oligoguanylate to scavenger receptors is required for oligonucleotides to augment NK cell activity and induce IFN. J Biochem (Tokyo). 1994 Nov;116(5):991-4.	
	C68	KLINMAN et al., Immunotherapeutic uses of CpG oligodeoxynucleotides. Nature Reviews. 2004 Apr;4:1-10.	
	C69	KLINMAN et al., Immunotherapeutic applications of CpG-containing oligodeoxynucleotides. Drug News Perspect. 2000 Jun;13(5):289-96.	
	C70	KLINMAN et al., CpG oligonucleotides improve the protective immune response induced by the anthrax vaccination of rhesus macaques. Vaccine. 2004 Jul 29;22(21-22):2881-6.	
	C71	KLINMAN et al., Repeated administration of synthetic oligodeoxynucleotides expressing CpG motifs provides long-term protection against bacterial infection. Infect Immun. 1999 Nov;67(11):5658-63.	
	C72	KLINMAN et al., Activation of the innate immune system by CpG oligodeoxynucleotides: immunoprotective activity and safety. Springer Semin Immunopathol. 2000;22(1-2):173-83.	
	C73	KLINMAN et al., Immune recognition of foreign DNA: a cure for bioterrorism? Immunity. 1999 Aug;11(2):123-9.	
	C74	KLINMAN et al., Contribution of CpG motifs to the immunogenicity of DNA vaccines. J Immunol. 1997 Apr 15;158(8):3635-9.	
	C75	KLINMAN et al., CpG motifs present in bacteria DNA rapidly induce lymphocytes to secrete interleukin 6, interleukin 12, and interferon gamma. Proc Natl Acad Sci U S A. 1996 Apr 2;93(7):2879-83.	
	C76	KOVARIK et al., CpG oligodeoxynucleotides can circumvent the Th2 polarization of neonatal responses to vaccines but may fail to fully redirect Th2 responses established by neonatal priming. J Immunol. 1999 Feb 1;162(3):1611-7.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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				APPLICANT: Bratzler et al.			
				GROUP ART UNIT: 1648		EXAMINER: Emily M. Le	
Sheet	12	of	18				

	C77	KRANZER et al. CpG-oligodeoxynucleotides enhance T-cell receptor-triggered interferon-gamma production and up-regulation of CD69 via induction of antigen-presenting cell-derived interferon type I and interleukin-12. Immunology. 2000 Feb;99(2):170-8.	
	C78	KRIEG et al., Immune effects and therapeutic applications of CpG motifs in bacterial DNA. Immunopharmacology. 2000 Jul 25;48(3):303-5.	
	C79	KRIEG et al., American College of Rheumatology 58 th National Scientific Meeting. Minneapolis, Minnesota, October 22, 1994. Abstracts. Arthritis Rheum. 1994 Sep;37(9 Suppl).	
	C80	KRIEG et al., Oligodeoxynucleotide modifications determine the magnitude of B cell stimulation by CpG motifs. Antisense Nucleic Acid Drug Dev. 1996 Summer;6(2):133-9.	
	C81	KRIEG et al., Phosphorothioate oligodeoxynucleotides: antisense or anti-protein? Antisense Res Dev. 1995 Winter;5(4):241.	
	C82	KRIEG et al., Leukocyte stimulation by oligodeoxynucleotides, Applied Antisense Oligonucleotide Technology, 1998; 431-448.	
	C83	KRIEG, CpG DNA: a pathogenic factor in systemic lupus erythematosus? J Clin Immunol. 1995 Nov;15(6):284-92.	
	C84	KRIEG et al., CpG motifs in bacterial DNA trigger direct B-cell activation. Nature. 1995 Apr 6;374(6522):546-9.	
	C85	KRIEG et al., Modification of antisense phosphodiester oligodeoxynucleotides by a 5' cholesteryl moiety increases cellular association and improves efficacy. Proc Natl Acad Sci U S A. 1993 Feb 1;90(3):1048-52.	
	C86	KRIEG et al., The role of CpG dinucleotides in DNA vaccines. Trends Microbiol. 1998 Jan;6(1):23-7.	
	C87	KRIEG, An innate immune defense mechanism based on the recognition of CpG motifs in microbial DNA. J Lab Clin Med. 1996 Aug;128(2):128-33.	
	C88	KRIEG et al., Direct immunologic activities of CpG DNA and implications for gene therapy. J Gene Med. 1999 Jan-Feb;1(1):56-63.	
	C89	KRIEG et al., Applications of immune stimulatory CpG DNA for antigen-specific and antigen-nonspecific cancer immunotherapy. Eur J Canc. 1999 Oct; 35/Suppl4:S10. Abstract #14.	
	C90	KRIEG et al., CpG motifs in bacterial DNA and their immune effects. Annu Rev Immunol. 2002;20:709-60. Epub 2001 Oct 04.	
	C91	KRIEG et al., Causing a commotion in the blood: immunotherapy progresses from bacteria to bacterial DNA. Immunol Today. 2000 Oct;21(10):521-6.	
	C92	KRIEG et al., Chapter 8: Immune Stimulation by Oligonucleotides. in Antisense Research and Application. Crooke, editor. 1998; 243-62.	
	C93	KRIEG et al., A role for endogenous retroviral sequences in the regulation of lymphocyte activation. J Immunol. 1989 Oct 15;143(8):2448-51.	
	C94	KRIEG et al., 1996 Meeting on Molecular Approaches to the Control of Infectious Diseases. Cold Spring Harbor Laboratory, September 9-13, 1996: p116.	
	C95	KRIEG et al., Enhancing vaccines with immune stimulatory CpG DNA. Curr Opin Mol Ther. 2001 Feb;3(1):15-24.	
	C96	KRIEG et al., Ernst Schering Research Found Workshop, (30): 105-18, 2001.	

EXAMINER:	DATE CONSIDERED:

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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				APPLICANT: Bratzler et al.			
				GROUP ART UNIT: 1648		EXAMINER: Emily M. Le	
Sheet	13	of	18				

C97	KRIEG, Immune effects and mechanisms of action of CpG motifs. Vaccine. 2000 Nov 8;19(6):618-22.	
C98	KRIEG et al., Chapter 17:Immune stimulation by oligonucleotides. in Antisense Drug Tech. 2001;1394:471-515.	
C99	KRIEG et al., Mechanisms and applications of immune stimulatory CpG oligodeoxynucleotides. Biochim Biophys Acta. 1999 Dec 10;1489(1):107-16.	
C100	KRIEG et al., The CpG motif: Implications for clinical immunology. BioDrugs. 1998 Nov 1;10(5):341-6.	
C101	KRIEG, The role of CpG motifs in innate immunity. Curr Opin Immunol. 2000 Feb;12(1):35-43.	
C102	KRIEG et al., Mechanism of action of CpG DNA. Curr Top Microbiol Immunol. 2000;247:1-21.	
C103	KRIEG et al., Mechanisms and therapeutic applications of immune stimulatory CpG DNA. Pharmacol Ther. 1999 Nov;84(2):113-20.	
C104	KRIEG et al., Sequence motifs in adenoviral DNA block immune activation by stimulatory CpG motifs. Proc Natl Acad Sci U S A. 1998 Oct 13;95(21):12631-6.	
C105	KRIEG et al., CpG DNA induces sustained IL-12 expression in vivo and resistance to Listeria monocytogenes challenge. J Immunol. 1998 Sep 1;161(5):2428-34.	
C106	KRIEG et al., CpG DNA: a novel immunomodulator. Trends Microbiol. 1999 Feb;7(2):64-5.	
C107	KRIEG, Signal transduction induced by immunostimulatory CpG DNA. Springer Semin Immunopathol. 2000;22(1-2):97-105.	
C108	KRIEG et al., How to exclude immunostimulatory and other nonantisense effects of antisense oligonucleotides. Manual of Antisense. 1999:79-89.	
C109	KRIEG et al., Unmethylated CpG DNA protects mice from lethal listeria monocytogenes challenge. Vaccines. 1997; 97:77-9.	
C110	KRIEG et al., Infection. In McGraw Hill Book. 1996: 242-3.	
C111	KRIEG et al., Lymphocyte activation by CpG dinucleotide motifs in prokaryotic DNA. Trends Microbiol. 1996 Feb;4(2):73-6.	
C112	KRUG et al., Identification of CpG oligonucleotide sequences with high induction of IFN-alpha/beta in plasmacytoid dendritic cells. Eur J Immunol. 2001 Jul;31(7):2154-63.	
C113	KRUG et al., Toll-like receptor expression reveals CpG DNA as a unique microbial stimulus for plasmacytoid dendritic cells which synergizes with CD40 ligand to induce high amounts of IL-12. Eur J Immunol. 2001 Oct;31(10):3026-37.	
C114	KULKARNI et al., Effect of dietary nucleotides on response to bacterial infections. JPEN J Parenter Enteral Nutr. 1986 Mar-Apr;10(2):169-71	
C115	KURAMOTO et al., Changes of host cell infiltration into Meth A fibrosarcoma tumor during the course of regression induced by injections of a BCG nucleic acid fraction. Int J Immunopharmacol. 1992 Jul;14(5):773-82.	
C116	KURAMOTO et al., Oligonucleotide sequences required for natural killer cell activation. Jpn J Cancer Res. 1992 Nov;83(11):1128-31.	
C117	KURAMOTO et al., In situ infiltration of natural killer-like cells induced by intradermal injection of the nucleic acid fraction from BCG. Microbiol Immunol. 1989;33(11):929-40.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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				GROUP ART UNIT: 1648		EXAMINER: Emily M. Le	
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	C118	LEDERMAN et al., Polydeoxyguanine motifs in a 12-mer phosphorothioate oligodeoxynucleotide augment binding to the v3 loop of HIV-1 gp120 and potency of HIV-1 inhibition independency of G-tetrad formation. Antisense Nucleic Acid Drug Dev. 1996 Winter;6(4):281-9.	
	C119	LETSINGER et al., Cholesteryl-conjugated oligonucleotides: synthesis, properties, and activity as inhibitors of replication of human immunodeficiency virus in cell culture. Proc Natl Acad Sci U S A. 1989 Sep;86(17):6553-6.	
	C120	LETSINGER et al., Synthesis and properties of modified oligonucleotides. Nucleic Acids Symp Ser. 1991;(24):75-8.	
	C121	LIPFORD et al., CpG-containing synthetic oligonucleotides promote B and cytotoxic T cell responses to protein antigen: a new class of vaccine adjuvants. Eur J Immunol. 1997 Sep;27(9):2340-4.	
	C122	LIPFORD et al., Immunostimulatory DNA: sequence-dependent production of potentially harmful or useful cytokines. Eur J Immunol. 1997 Dec;27(12):3420-6.	
	C123	LIPFORD et al., Bacterial DNA as immune cell activator. Trends Microbiol. 1998 Dec;6(12):496-500.	
	C124	LIU et al., Recombinant interleukin-6 protects mice against experimental bacterial infection. Infect Immun. 1992 Oct;60(10):4402-6.	
	C125	LIU et al., CpG ODN is an effective adjuvant in immunization with tumor antigen. J Invest Med. 1997 Sept7;45(7):333A.	
	C126	MALANCHERE-BRES et al., CpG oligodeoxynucleotides with hepatitis B surface antigen (HbsAg) for vaccination in HbsAg-transgenic mice. J Virol. 2001 Jul;75(14):6482-91.	
	C127	MANCILLA-RAMIREZ et al., [Phosphatidylcholine induces an increase in the production of interleukin-6 and improves survival of rats with neonatal sepsis caused by Klebsiella pneumoniae] Gac Med Mex. 1995 Jan-Feb;131(1):14-22.	Y-Abstract
	C128	MARTIN-OROZCO et al., Enhancement of antigen-presenting cell surface molecules involved in cognate interactions by immunostimulatory DNA sequences. Int Immunol. 1999 Jul;11(7):1111-8.	
	C129	MATSUKURA et al., Regulation of viral expression of human immunodeficiency virus in vitro by an antisense phosphorothioate oligodeoxynucleotide against rev (art/trs) in chronically infected cells. Proc Natl Acad Sci U S A. 1989 Jun;86(11):4244-8.	
	C130	McCLUSKIE et al., CpG DNA is a potent enhancer of systemic and mucosal immune responses against hepatitis B surface antigen with intranasal administration to mice. J Immunol. 1998 Nov 1;161(9):4463-6.	
	C131	McCLUSKIE et al., CpG DNA as mucosal adjuvant. Vaccine, 18: 231-237, 2000.	
	C132	McCLUSKIE et al., Oral, intrarectal and intranasal immunizations using CpG and non-CpG oligodeoxynucleotides as adjuvants. Vaccine. 2000 Oct 15;19(4-5):413-22.	
	C133	McCLUSKIE et al., Immunization against hepatitis B virus by mucosal administration of antigen-antibody complexes. Viral Immunol. 1998;11(4):245-52.	
	C134	McCLUSKIE et al., CpG DNA is an effective oral adjuvant to protein antigens in mice. Vaccine. 2000 Nov 22;19(7-8):950-7.	
	C135	McCLUSKIE et al., The potential of oligodeoxynucleotides as mucosal and parenteral adjuvants. Vaccine. 2001 Mar 21;19(17-19):2657-60.	

EXAMINER:	DATE CONSIDERED:

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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				GROUP ART UNIT: 1648		EXAMINER: Emily M. Le	
Sheet	15	of	18				

	C136	McCLUSKIE et al., The use of CpG DNA as a mucosal vaccine adjuvant. Curr Opin Investig Drugs. 2001 Jan;2(1):35-9.	
	C137	McCLUSKIE et al., The role of CpG in DNA vaccines. Springer Semin Immunopathol. 2000;22(1-2):125-32.	
	C138	MESSINA et al., The influence of DNA structure on the in vitro stimulation of murine lymphocytes by natural and synthetic polynucleotide antigens. Cell Immunol. 1993 Mar;147(1):148-57.	
	C139	MOJCIK et al., Administration of a phosphorothioate oligonucleotide antisense to murine endogenous retroviral MCF env causes immune effects in vivo in a sequence-specific manner. Clin Immunol Immunopathol. 1993 May;67(2):130-6.	
	C140	MOLDOVEANU et al., CpG DNA, a novel immune enhancer for systemic and mucosal immunization with influenza virus. Vaccine. 1998 Jul;16(11-12):1216-24.	
	C141	MOSS et al., In vitro immune function after vaccination with an inactivated, gp120-depleted HIV-1 antigen with immunostimulatory oligodeoxynucleotides. Vaccine. 2000 Jan 6;18(11-12):1081-7.	
	C142	PAYETTE et al., History of vaccines and positioning of current trends. Curr Drug Targets Infect Disord. 2001 Nov;1(3):241-7.	
	C143	PISETSKY et al., The immunologic properties of DNA. J Immunol. 1996 Jan 15;156(2):421-3.	
	C144	PISETSKY et al., Immunological properties of bacterial DNA. Ann N Y Acad Sci. 1995 Nov 27;772:152-63.	
	C145	PISETSKY et al., Stimulation of murine lymphocyte proliferation by a phosphorothioate oligonucleotide with antisense activity for herpes simplex virus. Life Sci. 1994;54(2):101-7.	
	C146	PISETSKY, Immunologic consequences of nucleic acid therapy. Antisense Res Dev. 1995 Fall;5(3):219-25.	
	C147	PISETSKY et al., Stimulation of in vitro proliferation of murine lymphocytes by synthetic oligodeoxynucleotides. Mol Biol Rep. 1993 Oct;18(3):217-21.	
	C148	PISETSKY, The influence of base sequence on the immunostimulatory properties of DNA. Immunol Res. 1999;19(1):35-46.	
	C149	POLANCZYK et al., Immunostimulatory effects of DNA and CpG motifs. Cent Eur J of Immunol. 2000;25(3):160-6.	
	C150	RANKIN et al., CpG motif identification for veterinary and laboratory species demonstrates that sequence recognition is highly conserved. Antisense Nucleic Acid Drug Dev. 2001 Oct;11(5):333-40.	
	C151	RAY et al., Experimental Biology 2001. Orlando, Florida, USA. March 31-April 4, 2001. Abstracts, part II. FASEB J. 2001 Mar 8;15(5):A1007.	
	C152	RAZ et al., Potential role of immunostimulatory DNA sequences (ISS) in genetic immunization and autoimmunity. ACR Poster Session C: Cytokines and Inflammatory Mediators. 1996 Oct 20; Abstract Number 615.	
	C153	ROMAN et al., Immunostimulatory DNA sequences function as T helper-1-promoting adjuvants. Nat Med. 1997 Aug;3(8):849-54.	
	C154	SATO et al., Immunostimulatory DNA sequences necessary for effective intradermal gene immunization. Science. 1996 Jul 19;273(5273):352-4.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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				GROUP ART UNIT: 1648		EXAMINER: Emily M. Le	
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	C155	SCHWARTZ et al., Bacterial DNA or oligonucleotides containing unmethylated CpG motifs can minimize lipopolysaccharide-induced inflammation in the lower respiratory tract through an IL-12-dependent pathway. J Immunol. 1999 Jul 1;163(1):224-31.	
	C156	SEDEGAH et al., Interleukin 12 induction of interferon gamma-dependent protection against malaria. Proc Natl Acad Sci U S A. 1994 Oct 25;91(22):10700-2.	
	C157	SESTER et al., Phosphorothioate backbone modification modulates macrophage activation by CpG DNA. J Immunol. 2000 Oct 15;165(8):4165-73.	
	C158	SJOLANDER et al., Kinetics, localization and isotype profile of antibody responses to immune stimulating complexes (iscoms) containing human influenza virus envelope glycoproteins. Scand J Immunol. 1996 Feb;43(2):164-72.	
	C159	SPARWASSER et al., Bacterial DNA causes septic shock. Nature. 1997 Mar 27;386(6623):336-7.	
	C160	SPARWASSER et al., Bacterial DNA and immunostimulatory CpG oligonucleotides trigger maturation and activation of murine dendritic cells. Eur J Immunol. 1998 Jun;28(6):2045-54.	
	C161	SPARWASSER et al., Immunostimulatory CpG-oligodeoxynucleotides cause extramedullary murine hemopoiesis. J Immunol. 1999 Feb 15;162(4):2368-74.	
	C162	SPARWASSER et al., Macrophages sense pathogens via DNA motifs: induction of tumor necrosis factor-alpha-mediated shock. Eur J Immunol. 1997 Jul;27(7):1671-9.	
	C163	STACEY et al. Immunostimulatory DNA as an adjuvant in vaccination against Leishmania major. Infect Immun. 1999 Aug;67(8):3719-26.	
	C164	STEIN et al., Non-antisense effects of oligodeoxynucleotides. Antisense Technology. 1997; ch11: 241-64.	
	C165	STEIN et al., Antisense oligonucleotides as therapeutic agents--is the bullet really magical? Science. 1993 Aug 20;261(5124):1004-12.	
	C166	SUN et al. Type I interferon-mediated stimulation of T cells by CpG DNA. J Exp Med. 1998 Dec 21;188(12):2335-42.	
	C167	SUN et al. Multiple effects of immunostimulatory DNA on T cells and the role of type I interferons. Springer Semin Immunopathol. 2000;22(1-2):77-84.	
	C168	THREADGILL et al., Mitogenic synthetic polynucleotides suppress the antibody response to a bacterial polysaccharide. Vaccine. 1998 Jan;16(1):76-82.	
	C169	TOKUNAGA et al., A synthetic single-stranded DNA, poly(dG,dC), induces interferon-alpha/beta and -gamma, augments natural killer activity, and suppresses tumor growth. Jpn J Cancer Res. 1988 Jun;79(6):682-6.	
	C170	TOKUNAGA et al., Synthetic oligonucleotides with particular base sequences from the cDNA encoding proteins of Mycobacterium bovis BCG induce interferons and activate natural killer cells. Microbiol Immunol. 1992;36(1):55-66.	
	C171	VERTHELYI et al., Human peripheral blood cells differentially recognize and respond to two distinct CPG motifs. J Immunol. 2001 Feb 15;166(4):2372-7.	
	C172	WAAG et al., Injection of inactivated phase I Coxiella burnetii increases non-specific resistance to infection and stimulates lymphokine production in mice. Ann N Y Acad Sci. 1990;590:203-14.	
	C173	WAGNER et al., CpG motifs are efficient adjuvants for genetic vaccines to induce antigen-specific protective anti-tumor T cell responses. 2000;203:429. Abstract R46.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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				GROUP ART UNIT: 1648		EXAMINER: Emily M. Le	
Sheet	17	of	18				

	C174	WALKER et al., Immunostimulatory oligodeoxynucleotides promote protective immunity and provide systemic therapy for leishmaniasis via IL-12- and IFN-gamma-dependent mechanisms. Proc Natl Acad Sci U S A. 1999 Jun 8;96(12):6970-5.	
	C175	WARREN et al., APC stimulated by CpG oligodeoxynucleotide enhance activation of MHC class I-restricted T cells. J Immunol. 2000 Dec 1;165(11):6244-51.	
	C176	WEERATNA et al., Reduction of antigen expression from DNA vaccines by coadministered oligodeoxynucleotides. Antisense Nucleic Acid Drug Dev. 1998 Aug;8(4):351-6.	
	C177	WEERATNA et al., CpG ODN can re-direct the Th bias of established Th2 immune responses in adult and young mice. FEMS Immunol Med Microbiol. 2001 Dec;32(1):65-71.	
	C178	WEERATNA et al., CpG DNA induces stronger immune responses with less toxicity than other adjuvants. Vaccine. 2000 Mar 6;18(17):1755-62.	
	C179	WEERATNA et al., Priming of immune responses to hepatitis B surface antigen in young mice immunized in the presence of maternally derived antibodies. FEMS Immunol Med Microbiol. 2001 Apr;30(3):241-7.	
	C180	WEIGHARDT et al., Increased resistance against acute polymicrobial sepsis in mice challenged with immunostimulatory CpG oligodeoxynucleotides is related to an enhanced innate effector cell response. J Immunol. 2000 Oct 15;165(8):4537-43.	
	C181	WEINER et al., The immunobiology and clinical potential of immunostimulatory CpG oligodeoxynucleotides. J Leukoc Biol. 2000 Oct;68(4):455-63.	
	C182	WEINER et al., Immunostimulatory oligodeoxynucleotides containing the CpG motif are effective as immune adjuvants in tumor antigen immunization. Proc Natl Acad Sci U S A. 1997 Sep 30;94(20):10833-7.	
	C183	WYATT et al. Combinatorially selected guanosine-quartet structure is a potent inhibitor of human immunodeficiency virus envelope-mediated cell fusion. Proc Natl Acad Sci U S A. 1994 Feb 15;91(4):1356-60.	
	C184	YAMAMOTO et al., Lipofection of synthetic oligodeoxyribonucleotide having a palindromic sequence of AACGTT to murine splenocytes enhances interferon production and natural killer activity. Microbiol Immunol. 1994;38(10):831-6.	
	C185	YAMAMOTO et al., Unique palindromic sequences in synthetic oligonucleotides are required to induce IFN [correction of INF] and augment IFN-mediated [correction of INF] natural killer activity. J Immunol. 1992 Jun 15;148(12):4072-6.	
	C186	YAMAMOTO et al., [Commemorative lecture of receiving Imamura Memorial Prize. II. Mode of action of oligonucleotide fraction extracted from Mycobacterium bovis BCG] Kekkaku. 1994 Sep;69(9):571-4. Japanese.	
	C187	YAMAMOTO et al., Ability of oligonucleotides with certain palindromes to induce interferon production and augment natural killer cell activity is associated with their base length. Antisense Res Dev. 1994 Summer;4(2):119-22.	
	C188	YAMAMOTO et al., Synthetic oligonucleotides with certain palindromes stimulate interferon production of human peripheral blood lymphocytes in vitro. Jpn J Cancer Res. 1994 Aug;85(8):775-9.	
	C189	YI et al. Rapid induction of mitogen-activated protein kinases by immune stimulatory CpG DNA. J Immunol. 1998 Nov 1;161(9):4493-7.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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				APPLICANT: Bratzler et al.					
				GROUP ART UNIT: 1648		EXAMINER: Emily M. Le			
Sheet	18	of	18						

	C190	YI et al., Rapid immune activation by CpG motifs in bacterial DNA. Systemic induction of IL-6 transcription through an antioxidant-sensitive pathway. J Immunol. 1996 Dec 15;157(12):5394-402.	
	C191	YI et al., IFN-gamma promotes IL-6 and IgM secretion in response to CpG motifs in bacterial DNA and oligodeoxynucleotides. J Immunol. 1996 Jan 15;156(2):558-64.	
	C192	YI et al. CpG oligodeoxyribonucleotides rescue mature spleen B cells from spontaneous apoptosis and promote cell cycle entry. J Immunol. 1998 Jun 15;160(12):5898-906.	
	C193	ZHAO et al., Pattern and kinetics of cytokine production following administration of phosphorothioate oligonucleotides in mice. Antisense Nucleic Acid Drug Dev. 1997 Oct;7(5):495-502.	
	C194	ZIMMERMANN et al., CpG oligodeoxynucleotides trigger protective and curative Th1 responses in lethal murine leishmaniasis. J Immunol. 1998 Apr 15;160(8):3627-30.	

*a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. __, filed __, and relied upon for an earlier filing date under 35 U.S.C. 120 (continuation, continuation-in-part, and divisional applications).

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